

### Abstract of the Disclosure

Embodiments of a compression/decompression (codec) system may include a plurality of data compression engines each implementing a different data compression algorithm. A codec system may be designed for the reduction of data bandwidth and storage requirements and for compressing/decompressing data. Uncompressed data may be compressed using a plurality of compression engines in parallel, with each engine compressing the data using a different lossless data compression algorithm. At least one of the data compression engines may implement a parallel lossless data compression algorithm designed to process stream data at more than a single byte or symbol at one time. The plurality of different versions of compressed data generated by the different compression algorithms may be examined to determine an optimal version of the compressed data according to one or more predetermined criteria. A codec system may be integrated in a processor, a system memory controller or elsewhere within a system.